

ABSTRACT OF THE DISCLOSURE

A plurality of private address spaces where private addresses may possibly overlap are connected with a global address space. Respective private address spaces possess VLAN-IDs as identification information for VLANs. When connecting the respective private address spaces with the Internet, a duplicate network address translating device performs, with VLAN-ID and the private address of the respective private address spaces in pairs, mutual translation between the private address and global address of the Internet. According to another aspect of the invention, a duplicate addresses-handling server is provided with a routing table which shows the relationship between virtual interfaces corresponding to VLAN-IDs and addresses of the respective private address spaces. A server portion of the duplicate addresses-handling server records, if a request is made from apparatuses of a private address space, the request and VLAN-ID, refers to, if making a response thereto, the routing table, selects a virtual interface which corresponds to the address of the response receiver, and makes a response. A virtual interface processing portion gives an applicable VLAN-ID and carries out an output to a switching hub.